



4AC.057
Fabric – Basalt

Overview

Basalt fibre is an ecological and recyclable high-temperature material. Final Advanced Materials uses this fibre to manufacture products with greater resistance than glass fibre. In the motor vehicle industry, basalt fibre fabrics work as insulators for exhaust pipes and as protection for motor components. When coated, they are used as fire barrier, whereas untreated versions are ideal as matrix for composites.

Technical Data

Properties		Unit	Value		
Material			Basalt		
Composition		%	SiO ₂ : 57.5 Al ₂ O ₃ : 16.9 MgO: 3.7	Na ₂ O: 2.5 K ₂ O: 0.8 Fe ₂ O ₃ : 9.3	TiO ₂ : 1.1
Temperature	Operating	°C	700		
	Peak		800		

General Data

Material	Thermal resistivity	Mechanical strength	Chemical resistance
Basalt	★★★★☆	★★★★☆	★★★★★

Applications

- Exhaust systems
- Thermal insulation (piping)
- Electrical insulation



Available fabrics

Thickness (mm) \ Basis weight (g/m ²)	0.07	0.13	0.35	0.5	0.65
115	1TEX002239 Plain				
220		1TEX002240 Plain 1TEX002241 Twill 2-2			
350			1TEX002243 Satin		
440				1TEX002245 Satin	
630			1TEX002247 Twill 1/3		
880					1TEX002248 Twill 2-2

The fabrics are available untreated or with a clear water based Polyurethan (PU) coating.

PU coating: This coating stabilises the fabric and reduces the mechanical irritations caused by the stiffness of loose filaments. The cutting of the coated fabric is also easier. Basalt coated fabric isn't adapted to composite applications anymore but is mainly used as firewall.

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